

WEE LEARN CURRICULUM

Research Foundation

It is now known that very young children are competent, active agents of

their own conceptual development." ~ (NRC, 1999)

The early years are an important period of development. During these early years, children learn best through active, engaged, meaningful experiences¹. Through these experiences, young children construct their own knowledge by interacting with their environments and others. Specifically, it is in prekindergarten through third grade that children learn to read and write, acquire a basic understanding of content areas, and develop important dispositions toward learning. Researchers and educators agree that quality early care and education provides an invaluable foundation for later school and Whether with parents, relatives, or teachers, young children need work success. stimulation and nurturing to support appropriate physical, social, emotional, cognitive and language development. Indeed, the current focus on "leaving no child behind" clearly demonstrates the nation's desire to make success in school the norm for all children². It is unquestionably a time in the field of early care and education that school readiness has become a priority, although a fact of the nation's K-12 system, a growing number of states have developed or are now developing standards for younger children (birth to age five). School readiness is a term used to convey the importance of children entering school ready for success. It involves schools and communities as well as families and children.

School readiness is a multidimensional concept. A child's readiness for school is not simply a matter of alphabet knowledge, or other predominantly cognitive accomplishments, as important as those are. Rather, readiness includes social-emotional abilities, approaches to learning (i.e., dispositions such as curiosity and persistence), and communication skills, as well as motor development and physical health³. Ongoing research continues to confirm the need to think about children's readiness for school as multi-faceted⁴.

Over a decade ago, the National Education Goals Panel established its first National Education Goal: *By the year 2000, all children in America will start school ready to learn.* To reach this goal, the Goals Panel created three objectives for families and communities: (1) children will have access to high quality preschool programs; (2) every parent will be a child's first teacher; and (3) children will receive the health care, nutrition, and physical activities that they need to arrive at school healthy. The Goals Panel also recognized that school readiness is about more than just the readiness of children; it also includes the readiness of schools to receive children with different backgrounds and capabilities⁵. As perspectives about how children grow and learn broaden, it is also a time to begin the process of assessing children's performance related to standards to

ensure children are equipped with the skills and knowledge they will need for their later life success.

Early Education and Care Standards

"The context in which early childhood programs operate is characterized by ongoing debates about how best to teach young children and discussions about what sort of practice is most likely to contribute to their development and learning" (p. 2) (NAEYC, 1996). For many, a viable solution to the debates and discussions has been the creation of "standards" that serve as a method to build a common language and vocabulary among professionals and stakeholders.

Historically, the field of early care and education has focused on one type of standard - program standard to define requirements for important features of services children receive. Recently. another type of standards has come to the forefront of policy and practice - child standards that outcome define expectations for children's learning and development⁷. Standards in early care and education have been presented in the following areas:

Program Standards

- Classroom Standards
- Teaching and Curriculum Standards

Child Outcome Standards

- Content Standards
- Performance Standards

It is important to note that for this review and discussion, only one area of standards were used in the analysis. Performance standards are formal articulations of what is expected for children's growth and development and differ significantly from the other type of standards, program standards. Program standards provide criteria for important program features such as adult-child ratios, group size, or curricula. On the contrary, performance standards are relatively new in the field. Standards that articulate expectations for what children

should learn have potential benefits bevond addressing pressures for increased accountability'. Performance standards can clarify expectations for what should be taught, provide a common set of expectations for child outcome goals, and focus attention on important aspects of children's growth and development⁸. Some suggest that education, in general, can be improved by clearly defining what is to be taught, expectations for what children will learn, and how they will demonstrate what they have learned⁹.

"For those reluctant to use the term *standards*, other terms have been used to address the same intent – essential learning, desired results, learning and developmental guidelines, or learning goals. In essence, each of these terms are used to refer to the kinds of development and learning that should be taking place."

(National Institute for Early Education Research, 2004)

Today, standards have become woven into the very fabric of the patchwork quilt we call early care and education. In 2000, 16 states reported early childhood standards¹¹; yet in 2005, 43 states have standards related to young children's learning, with the remaining seven in varying stages of progress.

The relationship between performance standards and assessments or other accountability instruments is a

significant issue. The NAEYC-NAECS/SDE position statement suggested that effective standards must be linked to effective curriculum and classroom practices and that the relationship between assessment and standards must be evident⁷. In Florida specifically, the standards for Three-, Four-, and Five-Year-Old Children were designed with two main intentions: (1) to inform curriculum and instruction, and (2) to improve school readiness (other intentions nationally include improve program quality and provide a basis for instructional assessment)⁷.

Neuman and Roskos (in press) offer a statement that summarizes a poignant and fundamental issue that must not be overlooked by the professionals and families invested in ensuring young children receive high quality care and gain skills to become lifelong learners.

"How to retain the traditional strengths of early care and education and at the same time to *appropriately* align it with more formal educational systems (p. 3)."

Now viewed as a critical component of a state's capacity for developing systems

of service delivery for young children and their families¹³, some argue that early learning standards have the potential to help frame content and curriculum, professional development. and assessments, for helping children in early care and education settings to skills¹². school readiness develop Generally, standards can be thought to set a basis for comparison; a reference point against which other behaviors or issues can be evaluated. As the very definition implies, a desired level of uniformity can be achieved bv documenting noteworthy early achievements made by growing and developing young children.

For the purposes of this discussion three varying sets of standards are presented below. Several professionals, including members of professional organizations, researchers, policy experts, and state groups have made public their versions of standards for children ages three to five that encompass their professional views, research, and practical knowledge.

Professional Standards

NAEYC Curriculum Standards Aesthetic, cognitive, emotional, language, physical, and social

Rationale: Curriculum that is goaloriented and incorporates concepts and skills based on current research fosters children's learning and development. When informed by teachers' knowledge of individual children, a well-articulated curriculum guides teachers so they can provide children with experiences that foster growth across a broad range of developmental and content areas. It also brings intentionality to planning a daily schedule that incorporates time and materials for play, self-initiated learning, and creative expression, and provides opportunities for children to learn individually and in groups according to their developmental needs and interests.

Included in each domain are the following areas considered important for

inclusion in curriculum: essential characteristics: social-emotional developmen; language development; literacy development; early early mathematics: scientific inquiry and knowledge; understanding ourselves, our communities, and our world; creative expression and appreciation for the arts; and physical development and skills.

Indicators of Effective Curriculum:

- Children are active and engaged.
- Goals are clear and shared by all.

- Curriculum is evidenced-based.
- Valued content is learned through investigation and focused, intentional teaching.
- Curriculum builds on prior learning and experiences.
- Curriculum is comprehensive.
- Professional standards validate the curriculum's subject-matter content.
- The curriculum is likely to benefit children.

Research Standards

National Education Goals Panel Developmental Domains* *Physical well-being and motor, social and emotional, approaches to learning, language, cognitive and general knowledge*

PHYSICAL WELL-BEING & MOTOR DEVELOPMENT

Rationale: Healthy children enjoy a freedom that allows them to focus on or actively engage in experiences crucial to the learning process. Conversely, children with significant physical or developmental problems are forced to accommodate to discomfort. dependence, or special arrangements. They may develop a sense of being "different" from other children which can lead to problems in adapting to the school environment and their special circumstances or restrictions may inhibit their ability to develop an appropriate level of independence¹⁴. Ill health may also lead to increased absenteeism from school due to physical symptoms or medical appointments, and this can

exacerbate the problems associated with the universal challenges faced by all children and the further obstacles encountered by socially or economically disadvantaged children. For these reasons, any amplification of early development and learning should commence with attention to physical health and motor development.

General Definition: By assimilating the overlapping variables presented, as well as making accommodations for the wide range of "normal" individual differences, physical well-being can be assessed in children using three categories of criteria. The first category addresses children's physical development, and includes: (1) overall rate of growth; (2) level of physical fitness; and (3) body physiology. The second category addresses children's physical abilities, including: (1) gross motor skills; (2) fine motor skills; (3) oral motor skills; (4) sensorimotor skills; and (5) functional performance. The third category addresses background and contextual factors, focusing on the conditions under which development takes place and

including: (1) perinatal context; (2) caregiving environment; and (3) health care utilization¹⁴.

SOCIAL & EMOTIONAL DEVELOPMENT

Rationale: Despite the historic difficulty and the challenges associated with definitions of social codifying and emotional development, scholars. teachers, and practitioners recognize the intimate relationship between children's social and emotional competence and overall achievement in school and in later life. Moreover, they recognize that these domains, while understudied, may be quite malleable and receptive to intervention. To that end, scholars have turned their attention to examining social-emotional development, and although still elusive, a consensual definition and potential markers are emerging.

General Definition: Emotional and social development, though entwined conceptually and practically, can and separated need to be for this discussion. Thus, this report shall regard emotional characteristics as those that involve the individual's feeling states regarding the self and others. In contrast, social characteristics are those that involve the interaction of two or more people, especially interactions with peers and adults. Social functioning, refers to the interpersonal then. relationships and behavior that the individual establishes with others.

APPROACHES TOWARD LEARNING

Rationale: It is important to consider approaches toward learning, because first, the mere acquisition of knowledge, skills, and capacities is an insufficient criterion of developmental success and

an insufficient measure of program accomplishments. Children must be inclined to marshall such skills and capacities. For example, possession of a capacity does not necessarily mean that it will be used; children have the capacity to listen, but may or may not have the disposition to be listeners. Second, a narrow focus on skills as the end-product education of mav undermine the disposition to use the skills. Katz (1992) notes that early drills in reading while potentially imbuing certain reading skills may actually quash children's desire to be readers.

General Definition: Our analysis suggests that approaches to learning are influenced by predispositions that may be inborn or may be inculcated very the child's early in life. Such predispositions may reflect: gender, temperament, and cultural patterns and values. These predispositions may be present at birth and set the stage for how children approach learning situations -their learning styles. Learning styles are composed of aggregated variables that characterize ways of responding across situations. Learning styles, in contrast to predispositions, are malleable and include variables that affect how children attitudinally address the learning process: their openness to and curiosity about new tasks and challenges; their initiative. task persistence and attentiveness; their approach to reflection and interpretation; their capacity for invention and imagination; and their cognitive approaches to tasks.

LANGUAGE DEVELOPMENT

Rationale: Language ability is a highly valued dimension of early development and learning as demonstrated by a survey of kindergarten teachers who

identified language as the area where most "unready" children had difficulty¹⁶. The ability to communicate competently with other people is essential to function effectively within and across the broad range of activities that characterize everyday life. Children need to be able to use language as tool for а communication to express their own thoughts and feelings to others and to receive and interpret communications from other people. Language plays an equally crucial role in providing symbols for concepts role а fundamental for cognitive development.

Definition: General By definition, language development is the acquisition of linguistic forms and procedures, and social rules and customs for acts of expression and interpretation. Such knowledge has three essential components: content (meaning), form (structure), and use (function). These components of language are formally semantics. called syntax, and pragmatics¹⁷. In acquiring language, children learn words and structures that articulate ideas to be shared with others in their community and ways of using those words and structures to influence the ideas and actions of other people. Both the forms of language and the ways of using them are mutually agreed upon by the community of language users that is, they are "conventional." As such, the language development dimension is closely tied to development in the socialemotional dimension. Further, children use their language for accessing the knowledge they already have in order to gain new knowledge and language is crucial for conceptual development and thinking.

Researchers use the term "communicative competence" to

describe the complex set of skills encompassed in human language use ¹⁸. These skills include: (1) knowledge of the physical and sociocultural setting in which communication occurs; (2) knowledge about persons and their within settings; social roles (3) knowledge of the goals of interaction among persons; (4) skill in performing sequences of acts involving language to communicate successfully (achieve goals); (5) knowledge of the range of affective elements in communication (nonverbal communication, tone); (6) knowledge of the grammatical structure and meanings of words used in written or spoken language; (7) knowledge of the norms of communication that is, the rules or standards for marking social relations in communication; and (8) knowledge of genre--the structures or forms that communication takes such as story. speech. or formal casual conversation. These components of language development are interrelated and overlapping; skill in one component influences and is influenced by ability in another as well as by past experience and development.

COGNITION & GENERAL KNOWLEDGE

Rationale: Two influential theoretical perspectives on cognition are the landmark works of Jean Piaget (1952; 1954; 1965) and Lev Vygotsky (1978). Each of these theories assumes that knowledge results, at least in part, from children's construction of their own understanding through their natural ability to think about their actions and through their interactions with other people, adults, and children. Although traditional assessments have focused on evaluating what a child can achieve in isolation, this theoretical perspective

suggests that a more effective approach might be to examine what a child can achieve when performance is supported by others, and to consider the types of support necessary for the child to complete the task successfully.

General Definition: The cognitive and general knowledge dimension of early

early Toward common views and vocabulary. Washington, DC: United States Government Printing Office.

second

knowledge.

conventional

Florida Standards

Readiness School Performance Standards for Three-, Four-, and Fivevear-old children. Physical health. approaches to learning, social and emotional, language and communication. emergent literacy. cognitive development and general knowledge, and motor development

PHYSICAL HEALTH

General Definition: The physical health domain of the Florida School Readiness Performance Standards includes two kinds of knowledge: physical health and knowledge of wellness.

APPROACHES TO LEARNING

General Definition: This domain includes the following areas of early learning and development: eagerness and curiosity, persistence, creativity/ inventiveness, and planning/reflection.

SOCIAL & EMOTIONAL

General Definition: This domain includes the following areas of early learning and development: self-concept, self-control, interaction with others, relationships with familiar adults, and social problem solving.

LANGUAGE & COMMUNICAITON

General Definition: This domain includes the following areas of early learning and development: listening,

speaking, vocabulary, sentences and structure, and conversation.

development and learning includes at

least three different kinds of knowledge.

The first is physical knowledge, the

Adapted from Kagan, S., Moore, E., & Bredekamp, S. (Eds.). (1995). Reconsidering children's early development and learning:

is

logico-mathematical

knowledge.

and the third is social-

EMERGENT LITERACY

General Definition: This domain includes emergent reading and emergent writing.

COGNITIVE DEVELOPMENT & GENERAL KNOWLEDGE

Definition: This domain General includes the following areas of early learning and development: Subdomain: Mathematical Thinking including (1) mathematical processes, (2) patterns, relationships, and functions, (3)analysis, (4) number concept and operations, (5) geometry and spatial relations. measurement. (6) Subdomain: Scientific Thinking including (1) inquiry. Subdomain: Social Studies including (1) people, past and present, (2) human interdependence, (3) citizenship and government, (4) people and where they live. Subdomain: The Arts including (1) expression and representation, (2) understanding and appreciation.

MOTOR DEVELOPMENT

General Definition: This domain includes the following areas of early learning and development: gross motor development and fine motor development.

WEE Learn Curriculum

In large part, the presented standards set forth by NAEYC, NGP, and Florida are consistent and substantiate the importance of similar issues in young children's learning and development. However, the *Florida School Readiness Performance Standards for Three-, Four, and Five-year-old Children* varies on several levels. Although most researchers, educators, and policymakers agree that the presented domains are essential elements of readiness, there is some debate as to whether these dimensions are exhaustive²². Further, individuals vary with regard to what they believe should be included as indicators of the standard to be met on each of these dimensions.

First, Florida's standards include additional domains and more firmly demarcate areas within each domain as specifically separate domains. For example, the NGP presents physical well-being and motor development as one important domain of young children's learning and development. These topics appear as separate domains in Florida's standards including: physical health and motor development.

A recent addition to Florida's standards for four-year-old children was a new domain not before presented independently. In spring 2005, *emergent literacy* was added as an additional domain, now totaling seven. Within this domain, two major indicators were added: emergent reading and emergent writing.

Following is a presentation of significant findings about how young children develop and learn in their earliest years. In comparison, the standards presented by the state of Florida are the most comprehensive and the following discussion will be based on the following seven domains:

- Physical Health
- ► Approaches to Learning
- **Social and Emotional**
- ► Language and Communication
- Emergent Literacy
- Cognitive Development and General Knowledge, and
- Motor Development

The discussion focuses on the ideas of why these domains are important, what research tells us about them, and how the WEE Learn Curriculum puts these understandings into practice.

Physical Health

In an increasingly health-conscience society, it is important to remember that physical health and well-being is not only an issue for adults. Children's bodies grow at tremendous rates and demand several unique needs as they developmentally. progress Unfortunately, many children begin life with health challenges and many more acquire a health issue as they grow. For example, about 31 percent of all kindergarten students (1.2 million) had at least one health challenge in 1999, meaning they were either overweight. behind in their motor skills development, or in fair or poor health or had a disability².

An infant's physical health begins before birth. After birth, low birth weight and infant mortality are important risk factors to assess. Issues such as early nutrition. age-appropriate physical physical safety, appropriate growth. childhood immunization, and access to adequate health care also have important effects on the physical health of infants²³. For older children (3 - 5), good nutrition, access to adequate health care. physical safety. and immunization remain important influences on physical health during early childhood. Preschool children may begin learning about the importance of physical activity. Many basic eating habits are also developed and reinforced during early childhood. As a result, measures of nutrition and ageappropriate physical development are important indicators of physical health in voung children.

A healthy child whose basic needs have been met is able to focus on, and/or engage in, experiences crucial to the learning process²³.

The WEE Learn curriculum has several comprehensive and firm examples woven into daily activities that promote and encourage healthy practices and safe environments for children. For example, to ensure that children can perform oral hygiene routines, teachers can introduce the activity of painting with a toothbrush or sing with the children about brushing. Children are also taught about unhealthy snacks, as well as, involved in learning healthy alternatives such as making a fruit salad.



Approaches to Learning

The way a young child approaches learning results from his or her cultural and environmental background as well child's individual learning as characteristics. Together, these influences interact to determine how a child acquires and understands knowledge and applies that knowledge in meaningful ways. All children can and do acquire knowledge although their ability to demonstrate what they know varies because of social, emotional, development. physical and their background experiences. How a child approaches learning is often determined by the following: openness to and curiosity about new tasks and challenges, task persistence and attentiveness. reflection and interpretation of experiences, imagination and invention, and individual temperament. Each young child's approaches toward learning are unique. Cultural background and experiences contribute to a child's approach to tasks

and should be validated and respected. The social, physical and emotional development of a child, combined with experience and ability level help form a child's unique approach toward learning.

Some researchers have dubbed this domain of school readiness as the newest. least studied. and least understood domain²⁴. This domain refers to the behaviors and strategies that children utilize when confronted with learning in the other readiness domains. The components in this domain are less concrete including eagerness and curiosity. persistence. creativitv/ intuitiveness, and planning/reflection, yet the components encompassed in this domain are applicable for learning in all Further. readiness domains. other children's curiosity and persistence are supported by adults who direct their attention, structure their experiences, support their learning attempts, and regulate the complexity and difficulty levels of information for them²⁵.

Young children perceive and respond to their environment in a variety of ways based upon their unique combination of approaches to learning. They use a range of intelligences in interacting with others²⁶. Children also approach learning based upon their own individual personality type, as well as their unique temperament qualities²⁷.

The WEE Learn curriculum materials are sensitive to the uniqueness of each child's approach to new and familiar learning situations. Activities in units such as **I learn through my senses** and **I can go many places** establish opportunities for children from various comfort zones to explore and interact with their surroundings.



Social & Emotional

Feeling that one is contributing something to others appears to be especially motivating²⁸. Learners of all ages are more motivated when they can see the usefulness of what they are learning and when they can use that information to do something that has an impact on others²⁹.

A growing body of research has underscored the importance of children's early social behavior in school adaptation and achievement³⁰. Young children entering school with poor social behavior often have several obstacles to hurdle including peer rejection, behavior problems, and low levels of academic achievement³¹.

Most research focusing on children's early social behavior and school achievement has concentrated on social behavior in general, without specifying the aspects of social behavior that are especially important in school performance. However, increasing evidence suggests that aspects of children's learning-related social skills are related to early school performance and the transition to school ³¹. Morrow (1989) found that according to teachers. learning-related skills such as listening to instructions and directions, and compliance with teacher demands, were most important for success in kindergarten.

For many kindergartners, this reality will be difficult to obtain. In 1999, about 31 percent of all kindergartners (1.2 million) lagged behind in this domain, meaning they were behind in several behaviors or social skills².

Researchers find that being socially and emotionally ready for school is linked not only with more positive academic outcomes and later school success, but also with positive social and emotional development ³³.

The WEE Learn curriculum is designed to guide teachers in ensuring that children's growing social and emotional needs are supported and fostered. There are several activities rooted in the importance of exposing children to their expanding social and emotional worlds, as well as, supporting their

unique needs. Teachers are encouraged to implement units entitled **I make friends at preschool**, **I can express my feelings**, and **Being thankful**.



Language & Communication

Communication is a lifelong learning process beginning at birth. We communicate in many different ways like listening, speaking, gesturing, reading, and writing. Communication abilities help children to learn, form social relationships, express feelings, and participate in everyday activities.

Children, and adults for that matter, learn about new processes or new information in the light of what they already know and understand³⁴. The critical issue for those who fail to learn is not one of not being able to learn, but rather not being able to make sense of what they are trying to learn.

Given that language and literacy are constructed by individuals and groups as part of everyday life, speaking, listening, reading, viewing, writing and drawing are social practices that occur in a range of daily situations. Children learn what can be said or written, how it can be said or written, and to whom under what circumstances, through a myriad of experiences in a wide range of contexts³⁵.

The development of communication skills that include the ability to talk can be important to young children's later school success in terms of language and literacy measures³⁶. The inability to use language decontextually has been identified as a contributing factor to the reading/ writing difficulties of school-age children with language learning disabilities³⁷. For young children just learning to talk who spend hours each day away from parents or familiar communication partners, the need to find ways to bridge child care activities with home experiences is extremely important advancing children's for language development.

Many researchers have identified oral language as important in facilitating both early reading and writing skills³⁸.

The WEE Learn curriculum provides for several opportunities for teachers to incorporate a variety of language and communication experiences for children. Throughout the day teachers can involve children in storytelling with puppets or engaging in active listening games. Children have exposure to books and can experience music in a variety of activities focused on the importance of this domain.



Emergent Literacy

Learning to read successfully is heavily dependent on mastery of a number of basic perceptual, cognitive, and language processes, including phonological. orthographic. syntactic. semantic, and comprehension skills³⁹. research (summarized Recent in Shonkoff & Phillips, 2000) demonstrates that significant variability in aspects of children's early literacy emerges during the preschool years. Hence there is recognition increasing that literacv development starts long before children begin formal instruction in school and that later reading success is powerfully affected by the skills children acquire during these formative years.

Emergent literacy refers to the earliest signs of interest in and abilities related

to reading and writing⁴⁰. By the time a child enters formal schooling, they have already developed a diverse range of literacy skills. An emergent approach to literacy recognizes that much more is involved in literate behavior than simply decoding letters and words⁴¹. Emergent literacy encompasses children's oral language skills, story comprehension, and print concepts, as well as the prototypical letter recognition skills. It is important to note that children's experiences at home and in early care education settings contribute and significantly young children's to language and emergent literacy abilities⁴².

Research demonstrates that one of the most important teaching strategies for children between birth and age five is reading aloud using a style that engages them as active participants⁴².

The WEE Learn curriculum provides for several ongoing and daily activities grounded in the importance of children's emerging literacy skills. There is guidance for incorporating a book and listening center. Activities include talking about books and looking at books with a range of subjects and domain-specific lessons.



Cognitive Development & General Knowledge

Children are active and inquiring beings, and their cognitive development, whether toward optimal or disordered outcome, is not linear and can be affected by a multitude of factors both before and during childhood. Theorists have offered the idea that children move through stages of development whereas a child's organized ways of making sense of his or her experiences change with his or her age⁴³.

In every situation a child is placed, he or she interprets his or her experiences in different environments with a range of innate and learned skills. Children's cognitive development involves a host of intricate functions critical for later success including aspects of thinking from attention, memory and categorization skills to complex problem solving⁴³.

The capacities for the brain to develop begin in the womb and extend into adolescence. Some experts state that the brain continues to develop and pathways far into generate new adulthood. Cognitive development is intimately linked to the development of language, and physical emotions, development. The sensory qualities of the environment and infant interactions with it enrich a child's ability to previous intellectually connect experiences with new information and skills⁴⁴. newlv acquired

Between the years of two and six, children gain in a wide variety of skills – physical coordination, perception language, logical thinking and imagination. Virtually all theorists agree that brain maturation contributes importantly to these changes⁴³.

Several components of the WEE Learn curriculum incorporate important cognitive-relevant areas to ensure children have opportunities to exercise their cognitive development. Children are encouraged to explore their environments and be inquisitive through a variety of activities in units such as *I can discover spring*, *Outdoor fun*, and *Signs and symbols*. Children are encouraged to play memory games, work puzzles,

identify familiar faces in their families, sort patterns, and play guessing games.



Motor Development

The development of motor during infancy competencies and childhood are dependent upon and influenced by the growth and maturity characteristics of the child interacting with his environment. or her Environmental opportunities and restraints for movement interact with the biological bases of arowth and maturation to determine a child's unique path toward movement and success in gaining much needed gross and fine motor development skills

Motor development involves muscle control. It is the process through which a child acquires movement patterns and skills. It is a continuous process of modification that involves the interactions of several factors including, but not limited to, the physical growth and behavioral characteristics of a child and new movement experiences⁴⁵. All of these factors do not occur in a vacuum; rather they take place in the context of the physical and sociocultural environments within which a child grows and develops.

There are several features of early motor development such as reflexes of infancy, development of upright posture and independent walking, and development of other movement patterns. Fine motor control, or small muscle movement, refers to such abilities as manipulation of materials and tools, hand dominance, and eye-hand coordination. Gross motor control, or large muscle movement, refers to such characteristics as coordination. balance. purposeful control, and stability of body movements and functions. The development of reaching and grasping provides an example of how motor skills start out as gross, diffuse activity and move toward mastery of fine movements such as the pincer grasp (Berk, 1996, p. 188).

Interactions supporting physical development should foster the uniqueness of each child with recognition that the development of gross and fine motor skills is a complex mix of genetics, environment, and interrelated with other domains of development⁴³.

The activities embedded in the WEE Learn curriculum allow for many opportunities for children to move, jump, climb, play, and interact on a physical level that promotes their motor development.



Conclusions

The importance of high-quality early childhood education (ECE) provided in play groups, preschools, and kindergartens in preparation for formal education in primary schools is widely acknowledged. In particular children from disadvantaged families are thought to benefit from an early introduction into an educationally enriched environment²⁵. Ideally, children would enter kindergarten engaged in school, with good health, and with age-appropriate social development and cognitive skills. And, ideally, children would maintain their engagement in school and physical well-being throughout their early school years, while developing their social skills and advancing their cognitive achievement.

Research is affirming that young children are capable of understanding more complex concepts than once believed⁴⁶. Our youngest learners eagerly seek information through observation and experimentation, and from an early age they develop incredibly sophisticated ideas of how the world and those around them work⁴⁷. Quality early care and education settings deploy children's natural inclination to learn and encourages their understanding of essential concepts about their environments⁴⁸.

The WEE Learn curriculum not only offers cognitive challenges to the young children exposed to their framework, but also incorporates individual and age-appropriate practices. The WEE Learn curriculum is solidified on its base of concrete experience and focus on relationships, communication, and exploration of the environment. It is clearly evidenced that the curriculum is thoughtfully planned, comprehensive, cohesive, and integrated across each domain.

The WEE Learn curriculum provides systematic learning opportunities in language and early literacy, mathematics, science, social studies, the arts, physical development, and personal and social development. The curriculum is relevant to children's everyday experiences and highlights the importance of the family's role in linking a child's early experiences to the world around them.

REFERENCES

1. Helm, J., & Gronlund, G. (2000). Linking standards and engaged learning in the early years. *Early Childhood Research and Practice, 2*, 22-35.

2. Wertheimer, R., & Croan, T. (2003). Attending kindergarten and already behind: A statistical portrait of vulnerable young children. *Child Trends Research Brief*. Child Trends.

3. National Education Goals Panel (1992). *Resolutions of the National Education Goals Panel: Assessing progress: Goal 1.* Washington, DC: Author.

4. Huffman, L., Mehlinger, S., & Kerivan, A. (2000). *Risk factors for academic and behavioral problems at the beginning of school*. Bethesda, MD: The Child Mental Health Foundations and Agencies Network.

5. National Education Goals Panel (1991). *The national education goals report: Building a nation of learners*. Washington, DC: U.S. Government Printing Office.

6. A Position Statement of the National Association for the Education of Young Children (NAEYC). *Technology and young children-ages 3 through 8*. Adopted April 1996. NAEYC, Washington, D. C.

7. Scott-Little, C., Kagan, S., & Frelow, V. (2003). Creating the conditions for success with early learning standards: Results from a national study of state-level standards for children's learning prior to kindergarten. *Early Childhood Research and Practice, 5*, 25-50.

8. Mid-continent Research for Education and Learning (McREL). (2003). *Content knowledge* (3rd ed.) [Online]. Available: <u>http://www.mcrel.org/standards-benchmarks/docs/purpose.asp</u> [2003, August 8].

9. Ravitch, Diane. (1995). *National standards in American education: A citizen's guide*. Washington, DC: Brookings Institution. ED 400 617.

10. Shore, R., Bodrova, E., & Leong, D. (2004). Child outcome standards in pre-k programs: What are standards; What is needed to make them work? Preschool Policy Matters, 5. Accessed at the National Institute for Early Education Research: <u>http://nieer.org/docs/index.php?DocID=95</u>

11. Quality Counts (2002). *Building blocks for success: State efforts in early childhood education.* Bethesda, MD: Education Week.

12. Neuman, S., & Roskos, K. (in press). The state of pre-kindergarten standards. *Early Childhood Research Quarterly*.

13. Schweinhart, L. (2003). *Making validated educational models central in preschool standards*. New Brunswick, NJ: National Institute for Early Education Research.

14. Shonkoff, J. (1992). *Physical health and the concept of school readiness. Manuscript prepared for the Goal I Resource Group on School Readiness for the National Education Goals Panel.*

15. Katz, L. (1992). *Approaches to learning: Dispositions as a dimension of school readiness.* Manuscript prepared for the Goal I Resource Group on School Readiness for the National Education Goals Panel.

16. Boyer, E. (1991). *Ready to learn: A mandate for the nation*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

17. Lahey, M. (1988). *Language disorders and language development*. New York: Macmillan Publishing Company.

18. Hymes, D. (1972). Models of the interaction of language and social life. In J. Gumper & D. Hymes (Eds.), *Directions in sociolinguistics*. New York: Holt, Rinehart and Winston.

19a. Piaget, J. (1952). *The origins of intelligence in children*. New York: International University Press.

19b. Piaget, J. (1954). The child's construction of reality. New York: Basics Books.

19c. Piaget, J. (1965). *The child's conception of number*. New York: Norton. (Must change numbers below b/c 3 Piaget's).

20. Vygotsky, L. (1978). *Mind in society: The development of psychological processes*. Cambridge, MA: Harvard University Press.

21. Kagan, S., Moore, E., & Bredekamp, S. (Eds.). (1995). *Reconsidering children's early development and learning: Toward common views and vocabulary*. Washington, DC: United States Government Printing Office.

22. Meisels, S. (1999). *Assessing readiness: The transition to kindergarten*. Baltimore, MD: Brooks Publishing Co.

23. American Academy of Pediatrics. (1997). Recommended childhood immunization schedule - United States, January-December, 1997. *Pediatrics, 99*, 136-138.

24. Greenfield, D. (2005). *Approaches to learning: Foundations for an integrated curriculum* (unpublished). Presentation, School Readiness Quality Initiative Symposium. Tampa, FL.

25. Shonkoff, J., & Phillips, D. (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: The National Academy Press.

26. Gardner, H. (1983). Frames of mind. New York: Basic Books.

27. Thomas, A., Chess, S. (1987). Temperament and development. New York: Bruner/Mazel.

28. Schwartz, D., & Brandsford, J. (1999). *A time for telling*. Cognition and Instruction.

29. Pintrich, R., & Schunk, D. (1996). *Motivation in education: Theory , research and application*. Columbus, OH: Merill, Prentice Hall.

30. DeRosier, M., Kupersmidt, J., & Patterson, C. (1994). Children's academic and behavioral adjustment as a function of the chronicity and proximity of peer rejection. *Child Development*, *65*, 1799-1813.

31. McCelland, M., & Morrison, F. (2003). The emergence of learning-related social skills in preschool children. *Early Childhood Research Quarterly*, *18*, 206-224.

32. Morrow, L. (1988). Young children's responses to one-to-one story reading in school settings. *Reading Research Quarterly, 23,* 89-170.

33. Kurdek, L., & Sinclair, R. (2000). Psychological, family, and peer predictors of academic outcomes in first through fifth-grade children. *Journal of Educational Psychology*, *92*, 449-457.

34. Smith, F. (1986). *Insult to intelligence: The bureaucratic invasion of our classrooms*. Portsmouth, NH: Heinemann.

35. Raban, B. (2001). Early learning and literacy. In T. David (Ed.), *Advances in applied early childhood education, volume I: Promoting evidenced-based practice in early childhood education – Research and its implication* (pp. 171-184). London: JAI.

36. Davidson, R., & Snow, C. (1996). Five-year-olds' interactions with fathers vs. mothers. *First Language*, *16*, 223-242.

37. Wallach, G., & Butler, K. (Eds.). (1994). Language learning disorders in school-age children and adolescents: Some principles and applications. New York: Merrill.

38. Goswami, U. (2002). Early phonological development and the acquisition of literacy. In S.B. Neuman and D.K. Dickinson (Eds.), *Handbook of early literacy research*. New York: Guildford Press.

39. Biemiller, A. (1999). *Language and reading success*. Newton Upper Falls, MA: Brookline Books.

40. Whitehurst, G., & Lonigan, C. (1998). Child development and emergent literacy. *Child Development*, *69*, 848-872.

41. Beals, D., DeTemple, J., & Dickinson, D. (1994). Talking and listening that support early literacy development of children from low-income families. In D.K. Dickinson (Ed.), *Bridges to literacy: Children, families, and schools* (pp. 19-40). Cambridge, MA: Blackwell.

42. Halle, T., Calkins, J., Berry, D., & Johnson, R. (2003). *Promoting language and literacy in early childhood care and education settings*. Literature review. Child Care and Early Education Research Connections, www.childcareresearch.org.

43. Berk, L. (1996). *Infants, children, and adolescents* (2nd Edition). Boston, MS: Allyn and Bacon.

44. Wilber, D. (1993) Activities for infants. In Todd CM, (Ed.). *Day Care Center Connections,* 2, 4-6.

45. Malina, R. (2003). Motor development during infancy and early childhood: Overview and suggested directions for research. *International Journal of Sport and Health Science, 2,* 50-66.

46. National Research Council (2000). *How people learn: Brain, mind, experience and school.* Committee on developments in science of learning. Bradsford, J., Brown, A., & Cocking, R. (Eds.). Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

47. Gopnik, A., Meltzoff, A., Kuhl, P. (1999). *The scientist in the crib: What early learning tells us about the mind*. New York: William Morrow & Co.

48. Lally, J. (2000). Infants have their own curriculum: A responsive approach to curriculum planning for infants and toddlers. *Head Start Bulletin, 67,* 6-7.